

EUR/SES

*Any opinion would be for consideration prior to 1 Nov so that it could be considered by the Joint Committee meeting*

*R. Pardon*

STATINTL

FINAL REPORT

*Open dtd 30 Oct 73  
 ans by EXS 77-73  
 dtd 20 Dec 73*

of the US and USSR Specialists Meeting for the Project, "Studies and Modelling of River Basin Pollution," of the Working Group on "Water Pollution Prevention" (Philadelphia, Cincinnati, Washington, D.C., New York, 26 September - 9 October, 1973)

*Opinion  
 24 Oct 73*

In accordance with the US-USSR Agreement on Co-operation in the field of Environmental Protection, signed 23 May, 1972, and the work program agreed upon by the Joint Soviet-American Working Group in Moscow on 23 March, 1973, a delegation of Soviet Specialists dealing with river basin modelling and planning visited the US from the twenty-sixth of September to the ninth of October, 1973.

The Soviet Delegation was headed by V.R. Lozanskiy, Director of the All-Union Scientific Research Institute on Water Protection (VNIIVO). The US side was led by Mark A. Pisano, Director, Water Planning Division, Environmental Protection Agency. A list of participants is attached.\*

During their visit the Soviets discussed modelling and planning problems with responsible officials in the Delaware and Ohio river basins. They also observed the operation of treatment plants and research facilities in these basins.

Among those who spoke with the Soviet delegation during this part of the trip were the following:

1. Richard Tortoriello and Ralph Porges of the Delaware River Basin Commission, on their basin planning methodology;
2. Ray Hill, Charles Buck, and Phillip Gratke of the Gulf Oil Refinery, on new approach to treating refinery effluents;
3. Mr. Sideris of Hoffman-LaRoche Pharmaceutical Company, on that company's effluent treatment system;

\*See Annex I

4. Benjamin Reynolds of Green Valley Farms, on the treatment of dairy farm wastes and experimental use of effluent for crop irrigation;
5. Tom Cahill of the Tri-County Conservancy on planning methodology in the Brandywine River Basin;
6. Val Adamkus and Al Liebling of the Environmental Protection Agency, Region V, and C.R. Ownby, Ohio River Basin Coordinator, on the concept of Regional planning and the legal parameters of current pollution abatement strategies;
7. David Dunsmore of the Ohio River Valley Water Sanitation Commission on its modelling and monitoring techniques;
8. Fred E. Morr and J.M. Furman of the Ohio River Basin Commission on the formation and functioning of river basin commissions and the role of the States in river basin planning.

The following people took part in the in-depth discussion of river basin modelling and planning in Washington, D.C.:

1. James Meek and John Marler of the Environmental Protection Agency, on the development of basin, Regional, and facilities planning;
2. D.J. O'Connor, Robert Thomann, and John Mancini of Hydrosience, on approaches to river basin modelling and the model developed for the Delaware Estuary;
3. Robert Horn, Philip Taylor, and Philip Lindenstruth of the Environmental Protection Agency, on monitoring techniques.

The Soviet and American participants also discussed and agreed upon a proposal outlining their future goals and the means of realizing them.\* Briefly, the goals are to improve the methodology of water planning, to give each side a thorough understanding of the other's current planning methodology, implementation and enforcement procedures

\*See Annex II

and problems, and to broaden each side's perspective on its own pollution problems. The means of realizing these goals consist of exchanging information on the

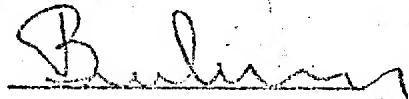
- 1) the goals of the pollution abatement programs;
- 2) the formulation of models and collection and utilization of data in their verification and application; and
- 3) the implementation of the plans. The final step is an experiment in which each country's planners would draw up a plan for one of their own rivers, using the other's planning methodology and data and legal and institutional norms. Implementation of this proposal would follow its approval by the leaders of the Water Pollution Working Group.

The final report was signed in Washington, D.C. on October 7, 1973 in two copies, English and Russian, being equally valid.



M. A. Pisano

Head of U.S. Delegation



V. R. Lazanskiy

Head of U.S.S.R.  
Delegation

. PARTICIPANTS

Soviet Delegation:

Head: V.R. Lozanskiy, Director of the All-Union Scientific Research Institution on Water Protection (VNIIVO)

Y.V. Veryemenko, Leader of the Hydrolics Laboratory, All-Union Scientific Institute on Water Protection

V.B. Stradomskiy, Deputy Director of the Hydrochemical Institute

U.S. Participants:

Head: Mark A. Pisano, Director, Water Planning Division, United States Environmental Protection Agency

W.P. Somers, Hydrologist, Water Planning Division United States Environmental Protection Agency

F.T. Cambell, Program Analyst, Water Planning Division United States Environmental Protection Agency

Interpreter: Vladimir Storoyev, United States Department of State

6 October, 1973

Work Plan for the Joint U. S.-U.S.S.R. Group on Studies and

Modelling of River Basin Pollution

It is proposed that the study have the following objectives:

1. To improve the methodology of water pollution planning through exchange of information and comparison of techniques, especially those concerned with optimization.
2. To give each side a thorough understanding of the method by which the other prepares a river basin plan, including the goals of the pollution abatement program, the data to be included, and the methods of obtaining and utilizing the data. Realization of this goal will take the form of access to the completed basin plans and observation of the process of their formulation.
3. To give each side a thorough understanding of the manner in which each side implements and enforces its basin plans, including legal and administrative responsibilities, plan adoption mechanisms, and implementation and enforcement procedures.
4. To give each side a broadened perspective from which to view pollution problems by a comparison of the U.S. and Soviet planning methodologies. Realization of this goal will take the form of each side drawing up a basin plan for one of their own rivers in compliance with the other's planning methodology and institutional and legal constraints.

The following steps are seen as providing the means for realizing these goals:

1. As an initial step, each side will become thoroughly familiar with the other's planning process. At this stage of the exchange, the extent of the pollution problem, goals and broad approach of the planning agency, the reasons for choosing a particular planning methodology, the type of plan expected to result and its relationship to the pollution problem are to be discussed.
2. The second step of the study should be to become familiar with the actual planning process. At the present time information on the following topics can be exchanged: which data are considered relevant; how they are collected and put into workable form; including advanced monitoring techniques; and the development and operation of the model, including a consideration of advanced modelling and optimization techniques.

It is envisaged that hypothetical river basins may be used in order to facilitate the process of mutual familiarization with the planning methodology. Simultaneously, work on actual river basin plans should be commenced. The achieved results will be discussed at the symposium which is scheduled to take place in the U.S.S.R. in 1975.

3. The third step of the study will consist of exchanging information on the implementation and enforcement of the plan. It can be implemented gradually as the river basin plans are realized. At the present time the legal and administrative framework for implementation and enforcement can be explained. Later, as problems in implementation are encountered, they will be discussed.
4. The culminating stage of the joint study will be the comparison of U.S. and Soviet planning systems. Each country's planners will utilize the other's planning methodology to draw up a pollution abatement plan which conforms to the institutional and legal constraints of that system. The resulting plans will be compared to the actual river basin plans in order to point up differences of approach between the two countries' planning systems and the relative strengths and weaknesses of these approaches.

The members of the river basin modelling sub-group accept these goals and implementing steps as an outline of their proposed joint study, subject to the approval of the leaders of the Water Pollution Working Group.

Implementing Steps for the Proposed Work Plan.

The United States will carry out river basin management plans for the Delaware and Ohio Rivers.

The Soviet Union will initiate a river basin water quality management system for the Seversky Donets; it will also prepare a model plan for that river, to be completed prior to the meeting of the symposium in the USSR.

The United States will send the Soviet side information concerning monitoring and a computer equipment within one month.

The U.S. delegation thinks it would be advisable for each side to send a technician to the other country to promote a fuller understanding at each side's planning system and legal and institutional approaches.

The U.S. and USSR will send additional technical, legal, and institutional information within three months to be used in preparing the experimental basin plans.

Both countries will meet in the USSR to discuss the status of their planning projects in the autumn of 1975.